IN THE CLAIMS:

1. (Currently amended) An automatic, mechanical, continuously variable transmission (1) comprising

an input shaft (2);

a flywheel (10) connected to the input shaft;

a drive assembly (5) including a drive pulley (6) defined by a first half-pulley (6a) and a second half-pulley (6b) which define a groove (8) of variable width for driving a belt (C);

friction clutch means (12) interposed axially between said first half-pulley (6a) and said flywheel (10);

a centrifugal actuating assembly (42) comprising

a centrifugal actuating device (40) controlling said clutch means (12); said actuating device (40) including push means (54, 61) for exerting an axial thrust on said first half-pulley (6a) through a force transmitting path not including the second half-pulley when an angular speed value of said input shaft (2) is greater than a first threshold value[[,]] so as to connect said drive pulley (6) to said flywheel (10), and

a speed regulating device (41) for moving said second half-pulley (6b) axially with respect to said first half-pulley (6a) to adjust the width of the groove (8) of the drive pulley (6) in response to speed variations of said input shaft (2), said speed regulating device (41) being active only when the angular speed value of said input shaft (2) is above a second threshold value; said second threshold value being higher than said first threshold value.

2. (Previously presented) A transmission as claimed in Claim 1, wherein said drive assembly (5) comprises a sleeve (15) fitted to said input shaft (2); said first half-pulley

(6a) being fixed with respect to said sleeve (15); and the second half-pulley (6b) being fitted in sliding manner to said sleeve (15).

3. (Previously presented) A transmission as claimed in Claim 1, wherein said clutch means (12) comprises a friction disk (24) interposed axially between said first half-pulley (6a) and said flywheel (10).

4. (Previously presented) A transmission as claimed in Claim 3, wherein said actuating device (40) comprises a number of auxiliary weights (48) rotating with said input shaft (2); said push means (54, 61) being interposed between said auxiliary weights (48) and said sleeve (15) to move said first half-pulley (6a) towards said flywheel (10) and to grip said friction disk (24) between said flywheel (10) and said first half-pulley (6a).

5. (Previously presented) A transmission as claimed in Claim 4, further comprising a reaction disk (45) connected to the input shaft (2) and having a conical wall (46); said actuating device (40) comprising a number of centrifugal auxiliary weights (48) cooperating with said conical wall (46); said push means (54, 61) of said actuating device (40) comprising an actuating ring (54) having a conical surface (56) facing said conical wall (46) of said reaction disk (45); and said auxiliary weights (48) having respective conical face surfaces (51, 53) cooperating respectively with said conical surface (56) of said actuating ring (54) and with said conical wall (46) of said reaction disk (45) to move said actuating ring (54) axially towards said sleeve (15) by virtue of the radial movement of said auxiliary weights (48).

6. (Previously presented) A transmission as claimed in Claim 5, wherein said actuating device (40) comprises a tubular drive member (61) connected to said sleeve (15); said actuating ring (54) and said tubular member (61) having respective facing, complementary conical friction surfaces (59, 60).

7. (Previously presented) A transmission as claimed in Claim 5, wherein said speed regulating device (41) comprises a push disk (65) connected to said second half-pulley (6b) and having a conical wall (67) facing said conical wall (46) of said reaction disk (45); and a number of main weights (68) having respective conical face surfaces (70, 71) cooperating with said conical walls (46, 67) to move said push disk (65) axially towards said flywheel (10) by radial movement of said main weights (68).

8. (Previously presented) A transmission as claimed in Claim 1, further comprising a torque-sensitive compensating device (13) acting between said half-pulleys (6a, 6b).

9. (Previously presented) A transmission as claimed in Claim 8, wherein said second half-pulley (6b) is fitted to said sleeve (15) to slide within limits defined by said compensating device (13).

10. (Previously presented) A transmission as claimed in Claim 9, wherein said compensating device (13) comprises at least one radial pin (18) connected to said sleeve (15) and a hub of said second half-pulley (6b); and at least one corresponding slot (19) formed in

in said sleeve and said hub of said second half-pulley (6b).

11. (Previously presented) A transmission as claimed in Claim 10, wherein said slot (19) is defined circumferentially by an axial side (19a) which cooperates with said pin (18) when accelerating, and by a sloping side (19c) which cooperates with said pin (18) when decelerating, to generate additional axial thrust acting between said half-pulleys (6a, 6b) in the axial compression direction of the belt (C).

12. (Previously presented) A transmission as claimed in Claim 2, further comprising a free wheel (32) interposed between said input shaft (2) and said sleeve (15).

13. (New) A transmission as claimed in Claim 1, wherein the first threshold value is between 1200-1400 rpm.

14. (New) An automatic, mechanical, continuously variable transmission comprising:

an input shaft;

a flywheel connected to the input shaft;

a drive assembly connectable to the flywheel, the drive assembly including a drive pulley defined by a first half-pulley and a second half-pulley which define a groove of variable width for driving a belt;

a clutch interposed axially between the first half-pulley and the flywheel;

a centrifugal actuating assembly comprising:

a centrifugal actuating device controlling the clutch means; the actuating device including a first set of weights engaging a push means for exerting an axial thrust through the push means on the first half-pulley when an angular speed value of the input shaft is greater than a first threshold value so as to connect the drive pulley to the flywheel, and

a speed regulating device for moving the second half-pulley axially with respect to said first half-pulley to adjust the width of the groove of the drive pulley in response to speed variations of said input shaft, the speed regulating device including a second set of weights engaging a push disk for exerting an axial thrust through the push disk on the second half-pulley when the angular speed value of the input shaft is above a second threshold value; the second threshold value being higher than the first threshold value.